

Table S1. Sampling Scheme for soil and plant samples across sites and seasons with filled circles (●) indicate collected samples while emptied circles (○) indicate uncollected samples. Due to the nature of field sampling, plant samples were not available at all sites. The sub-site ended with '-1' indicating areas outside the fence and '-2' indicating areas inside the fence.

Sampling site	Sub-site	Soil samples			Plant samples			
		winter	spring	summer	<i>S. krylovii</i> , SK		<i>A. frigida</i> , AF	
					winter	spring	winter	spring
S1		●	●	●	○	○	○	○
S2	2-1	●	●	●	●	○	●	○
	2-2	●	●	●	●	●	●	●
S3	3-1	●	●	●	●	●	●	●
	3-2	●	●	●	●	●	●	●
S4	4-1	●	●	●	●	●	○	●
	4-2	●	●	●	●	○	●	●
S5		●	●	●	○	○	○	○
S6		●	●	●	○	○	○	○
S7		●	●	●	●	●	○	●